

Curriculum Vitae

JUDITH L. MEYER, Odum School of Ecology, University of Georgia
Athens, Georgia

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B.S.	University of Michigan	1968
M.S.	University of Hawaii	1971
	Topic: Nutrient-limited growth of marine phytoplankton	
	Advisor: John Caperon	
Ph.D.	Cornell University	1978
	Topic: Phosphorus dynamics in a headwater stream	
	Advisor: Gene Likens	

EXPERIENCE

Distinguished Research Professor Emeritus, University of Georgia, 2006-
Distinguished Fellow, River Basin Center, University of Georgia, 2003-
Director for Science, River Basin Science and Policy Center, University
of Georgia, 2000-2002

Distinguished Research Professor, University of Georgia, 1996-2006
Professor of Ecology, University of Georgia, 1989-1996

Associate Professor of Zoology, University of Georgia, 1983-1989

Assistant Professor of Zoology, University of Georgia, 1977-1983

Visiting Fellow, Stream Ecology Centre, Chisholm Institute of
Technology, Melbourne, Australia, 1989

Research Associate, Oceanography Department, University of Hawaii,
1971-1972

N.S.F. Predoctoral Fellow, University of Hawaii, 1968-1971

INTERESTS

Terrestrial-aquatic ecosystem interactions; water quality and nutrient
dynamics in rivers and streams; dissolved organic carbon in rivers and
streams; aquatic food webs; river-floodplain exchanges; impacts of flow
regime and riparian management practices on lotic ecosystems; urban
streams and rivers; sediment impacts in streams; aquatic ecosystem
restoration; science-based water policy

HONORS AND AWARDS

Naumann-Thienemann Medal from International Limnological Society (2010)
Award of Excellence in Benthic Science from North American Benthological
Society (2003)

Excellence in Teaching Award (with J. B. Wallace), Institute of Ecology,
University of Georgia (2005)

Named one of 30 National Clean Water Act Heroes by the Clean Water
Network (2002)

Named Distinguished Research Professor of Ecology (1996)

Elected as Fellow of the American Association for the Advancement of
Science (1995)

Creative Research Medal, University of Georgia (1988)

Caperon and Meyer (1972a) was recognized as a Citation Classic
in Current Contents (1988)

Phi Beta Kappa

EDITORIAL AND ADVISORY ACTIVITIES

Editorial Boards

Ecological Issues (1995 - 2004)

Confronting Climate Change in Regions of the US, Ecological Society of America and Union of Concerned Scientists (1999-2004)
 Conservation Ecology (1996-98)
 Ecosystems (1996-2000)
 Annual Review of Ecology and Systematics (1995-2000)
 Biogeochemistry (1983-2000)
 Journal of the North American Benthological Society (1988-1991)
 Limnology and Oceanography (1984-1987)

Advisory Boards

EPA Chartered Science Advisory Board (2006 - present)
 EPA Science Advisory Board, Ecological Processes and Effects Committee (2001 - present; Chair 2006 - present)
 Committee to Advise the USGS National Water Quality Assessment (NAWQA) Program, National Academy of Sciences/National Research Council (2009 - present)
 Board of Directors, San Juan Preservation Trust (2009-present)
 Board on Environmental Studies and Toxicology, National Academy of Sciences/National Research Council (2003 - 2009)
 California Bay Delta Authority Independent Science Board (2003- 2008; Vice-Chair 2006 - 2008)
 Technical Evaluation (Chair) and Selection Panels for proposals submitted to the Ecosystem Restoration Program and the Science Program of the California Bay Delta Authority (2004-2005)
 EPA Gulf of Mexico Hypoxia Advisory Panel: Nutrient Transformation, Transport and Fate Workgroup Chair (2006 - 2007)
 Committee on Hydrology, Ecology and Fishes in the Klamath River Basin, National Academy of Sciences/National Research Council (2005 - 2007)
 Management Team, River Basin Science and Policy Center, University of Georgia (2000 - 2006)
 Advisory Committee, Legislative Committee on Statewide Comprehensive Water Management Planning, Georgia legislature (2001 -2002)
 Science and Technology Advisory Committee, American Rivers (1992-present; Chair 1999-2008)
 Board of Directors, American Rivers (1999 - 2008)
 Board of Directors, Upper Chattahoochee Riverkeeper (2000 - 2007)
 Freshwater Work Group, A Report on the Condition of the Nation's Ecosystems, H.J. Heinz III Center for Science, Economics and the Environment, Washington D.C. (1999 - 2002)
 Committee on Improving National Water Quality Assessment Program of the U.S. Geological Survey, National Academy of Sciences/National Research Council (1999 - 2001)
 Board of Directors, Georgia Environmental Policy Institute and Land Trust Service Center (1996-2001)
 Water Resources Sector Assessment Team, U.S. Global Change Research Program (1998 - 2000)
 ESA/Union of Concerned Scientists Advisory Committee for Regional Reports on Impacts of Global Climate Change (1998 - 2004)
 Science Advisory Board, MacArthur Agro-ecology Research Center, Archbold Biological Station (2000 - 2007)
 Committee on Research Opportunities and Priorities for the Environmental Protection Agency, National Academy of Sciences / National Research Council (1995-1998)
 Pacific Rivers Council, Board of Directors (1992-1996)
 Advisory Committee on Water Data for Public Use, U.S. Geological Survey (1993-1994)

Oversight Review Board, National Acid Precipitation Assessment
Program, Council on Environmental Quality (1993-1994)
Committee to Advise National Biological Survey, National Academy
of Sciences / National Research Council (1993)
Water Science and Technology Board, National Academy of Sciences /
National Research Council (1990-1993)
Task Force on Restructuring Biological, Behavioral and Social Sciences
Directorate of National Science Foundation (1990-1991)
Committee to Evaluate EPA's EMAP program, a National Academy of Sciences
/ National Research Council Advisory Committee, Water Science and
Technology Board (1991-1993)
U.S. National Committee for SCOPE (Scientific Committee on Problems of
the Environment), a National Academy of Sciences / National
Research Council Advisory Committee (1991-1993)
Chair, Committee to Assess the Science of Limnology, a National Academy
of Sciences / National Research Council Advisory Committee, Water
Science and Technology Board (1991-1992)
Oregon Rivers Council, Task Force to draft riverine landscape management
policy report (1991-1992)
Committee on National Water Quality Assessment, a National Academy of
Sciences / National Research Council Advisory Committee, Water
Science and Technology Board (1988-1990)
Member Advisory Panel to review proposals for NSF Ecosystem Studies
Program (1984-1987)
NRC Advisory Panel to review applicants for NSF pre-doctoral
fellowships in biology (1984, 1988, 1989)
Advisory Panel to review applications for EPA fellowships (1998-2000)
Advisory Panel to select recipients of NRC Postdoctoral Fellowships (1990)

SCIENTIFIC SOCIETIES

American Association for the Advancement of Science
American Society for Limnology and Oceanography
Ecological Society of America
International Limnological Society
North American Benthological Society
American Water Resources Association

ACTIVITIES IN SCIENTIFIC SOCIETIES

Elected positions:

President, Ecological Society of America (1994-1995)
Vice President, Ecological Society of America (1991-1992)
Governing Board, Ecological Society of America (1991 - 1996)
U.S. National Representative, International Society for Theoretical and
Applied Limnology (1992-2001)
Governing Board, Council of Scientific Society Presidents (1994-95)
Ecological Society of America Council (1985-87)
Chair, Aquatic Ecology Section of Ecological Society of America (1985-
1987)
Vice-chair, Aquatic Ecology Section of Ecological Society
of America (1983-1985)

Appointed positions:

Award of Excellence in Benthic Science Selection Committee, North
American Benthological Society (2004-2006, Chair 2005-2006)
Hynes Award Committee, North American Benthological Society (1999-2002,
Chair 2001-2002)
MacArthur Award Committee, ESA (2001-2004)
ESA Awards Committee (1998-2001)

Chair, Executive Committee, North American Benthological Society (1990-1991)

Mercer Award Committee, Ecological Society of America (1991-1992)

Chair, Ad-hoc Committee to Examine the Feasibility of ESA Publishing Issues Documents, Ecological Society of America (1991-1992)

Ad hoc committee on women and minorities, Ecological Society of America (1989-1991)

Chair, Committee for Award of Excellence in Benthic Ecology, North American Benthological Society (1988-1989)

Chair, Buell/Braun Award Subcommittee, Ecological Society of America (1989)

Chair, Subcommittee for Student Poster Award, Ecological Society of America (1986-88)

Program Committee, Ecological Society of America (1985-1987)

Executive Committee, North American Benthological Society (1981-1982 and 1986-1987)

Nominating Committee for Ecological Society of America (1981 and 1985)

Chair, Award for Best Student Paper at North American Benthological Society meeting (1982)

PUBLICATIONS

1972. Caperon, J. and J. L. Meyer. Nitrogen-limited growth of marine phytoplankton. Part I: Changes in population characteristics with steady-state growth rate. *Deep Sea Research* 19:601-618. (Included in L. R. Pomeroy, ed., *Cycles of Essential Elements*, pp. 151-168. Bowden, Hutchinson, and Ross, Stroudsburg, PA). Cited as Citation Classic (April 1988)
1972. Caperon, J, and J. L. Meyer. Nitrogen-limited growth of marine phytoplankton. Part II: Uptake kinetics and their role in nutrient-limited growth of phytoplankton. *Deep Sea Research* 19:619-632.
1972. R. E. Johannes et al. (including J. Meyer). The metabolism of some coral reef communities: a team study of nutrient and energy flux at Enewetak. *BioScience* 22:541-543. (Included in L. R. Pomeroy, ed., *Cycles of Essential Elements*, pp. 261-263. Dowden, Hutchinson, and Ross, Stroudsburg, PA).
1978. Meyer, J. L. Transport and transformation of phosphorus in a forest stream ecosystem. Ph.D. Dissertation. Cornell University Ithaca, NY. 226 p.
1979. Meyer, J. L. The role of sediments and bryophytes in phosphorus dynamics in a headwater stream ecosystem. *Limnol. Oceanogr.* 24:365-375.
1979. Meyer, J. L. and G. E. Likens. Transport and transformation of phosphorus in a stream ecosystem. *Ecology* 60:1255-1269.
1980. Meyer, J. L. Dynamics of phosphorus and organic matter during leaf decomposition in a forest stream. *Oikos* 34:44-53.
1981. Meyer, J. L., G. E. Likens, and J. Sloane. Phosphorus, nitrogen and organic carbon flux in a headwater stream ecosystem. *Archiv fur Hydrobiologie* 91:28-44.
1982. Helfman, G., J. L. Meyer and W. N. McFarland. Ontogeny of twilight migration patterns in grunts (Pisces: Haemulidae). *Animal Behavior* 30:317-326.
1982. Wallace, J. B., D. Ross and J. L. Meyer. Seston and dissolved organic carbon dynamics in a southern Appalachian

- stream. *Ecology* 63:824-838.
1982. Potter, D. U. and J. L. Meyer. Zooplankton communities of a new pumped-storage reservoir. *Water Resources Bulletin* 18:635-642.
1982. Potter, D. U., M. Stevens, and J. L. Meyer. Changes in physical and chemical variables in a new reservoir due to pumped storage operations. *Water Resources Bulletin* 18:627-633.
1983. Tate, C. and J. L. Meyer. The influence of hydrologic conditions and successional state on dissolved organic carbon export from forested watersheds. *Ecology* 64:25-32.
1983. Meyer, J. L. and C. Tate. The effects of watershed disturbance on dissolved organic carbon dynamics of a stream. *Ecology* 64:33-44.
1983. Meyer, J. L. and J. O'Hop. Leaf-shredding insects as a source of dissolved organic carbon in a headwater stream. *American Midland Naturalist* 109:175-183.
1983. Meyer, J. L. and C. Johnson. The influence of elevated nitrate concentration on leaf decomposition in a stream. *Freshwater Biology* 13:177-183.
1983. Meyer, J. L., E. T. Schultz and G. S. Helfman. Fish schools: an asset to corals. *Science* 220:1047-1049.
1983. Webster, J. R., M. E. Gurtz, J. J. Hains, J. L. Meyer, J. B. Waide, and J. B. Wallace. Stability in stream ecosystems. pp. 335-398 *In*: J. Barnes and G.W. Minshall (ed.), *Stream Ecology: Application and Testing of General Ecological Theory*. Plenum, N.Y.
1984. Findlay, S. G., J. L. Meyer, and R. T. Edwards. Measurement of bacterial production via rate of incorporation of ³H-thymidine into DNA. *Journal of Microbiological Methods* 2:57-72.
1984. Findlay, S. G. and J. L. Meyer. Significance of bacterial biomass and production as an organic carbon source in aquatic detrital systems. *Bulletin of Marine Science* 35 (3):318-325.
1984. Findlay, S., J. L. Meyer and P. J. Smith. The significance of bacterial biomass in the nutrition of a freshwater isopod (*Lirceus* sp.). *Oecologia* 63:38-42.
1985. Meyer, J.L. and E.T. Schultz. Tissue condition and growth rate of corals associated with schooling fish. *Limnology and Oceanography* 30:157-166.
1985. Meyer, J.L. and E.T. Schultz. Migrating haemulid fishes as a source of nutrients and organic matter on a coral reef. *Limnology and Oceanography* 30:146-156.
1986. Meyer, J.L. DOC dynamics of two subtropical blackwater rivers. *Archiv fur Hydrobiologie* 108:119-134.
1986. Findlay, S.G., J.L. Meyer and R. Risley. Benthic bacterial biomass and production in two blackwater rivers. *Canadian Journal of Fisheries and Aquatic Sciences* 43:1271-1276.
1986. Findlay, S.G., J.L. Meyer and P.J. Smith. Contribution of fungal biomass to the diet of a freshwater isopod (*Lirceus* sp.) *Freshwater Biology* 16:377-385.
1986. Findlay, S.G., P.J. Smith and J.L. Meyer. Effect of detritus addition on metabolism of river sediment. *Hydrobiologia* 137:257-264.

1986. Findlay, S., J.L. Meyer and P.J. Smith. Incorporation of microbial biomass by Peltoperla sp (Plecoptera) and Tipula sp. (Diptera). Journal of the North American Benthological Society 5:306-310.
1986. Edwards, R.T. and J.L. Meyer. Production and turnover of planktonic bacteria in two southeastern blackwater rivers. Applied and Environmental Microbiology 52:1317-1323.
1986. Findlay, S., L. Carlough, M.T. Crocker, H.K. Gill, J.L. Meyer and P.J. Smith. Bacterial growth on macrophyte leachate and fate of bacterial production. Limnology and Oceanography 31:1335-1341.
1987. Meyer, J.L., R.T. Edwards and R. Risley. Bacterial growth on DOC from a blackwater river. Microbial Ecology 13:13-29.
1987. Edwards, R.T. and J.L. Meyer. Metabolism of a sub-tropical low-gradient blackwater river. Freshwater Biology 17:251-263.
1987. Meyer, J.L., C.M. Tate, R.T. Edwards and M.T. Crocker. The trophic significance of DOC in streams. pp. 269-278 In: W.T. Swank and D.A. Crossley (eds.), Forest Hydrology and Ecology at Coweeta. Springer Verlag.
1987. Crocker, M.T. and J.L. Meyer. Interstitial dissolved organic carbon in sediments of a southern Appalachian stream. Journal of the North American Benthological Society 6:159-167.
1987. Edwards, R.T. and J.L. Meyer. Bacteria as a food source for black fly larvae in a blackwater river. Journal of the North American Benthological Society 6:241-250.
1988. Meyer, J.L. Benthic bacterial biomass and production in a blackwater river. Proceedings of the International Association of Theoretical and Applied Limnology 23:1832-1838.
1988. Benke, A.C. and J.L. Meyer. Structure and function of a blackwater river in the southeastern U.S.A. Proceedings of the International Association of Theoretical and Applied Limnology 23:1209-1218.
1988. Munn, N. and J.L. Meyer. Rapid flow through the sediments of a headwater stream in the southern Appalachians. Freshwater Biology 20:235-240.
1988. Meyer, J. and 8 others. Elemental dynamics in streams. Journal of the North American Benthological Society 7:410-432.
1989. Carlough, L.A. and J.L. Meyer. Protozoa in two southeastern blackwater rivers and their importance to trophic transfer. Limnology and Oceanography 34:163-177.
1989. Meyer, J. Can P/R ratio be used to assess the food base of stream ecosystems? Oikos 54:119-121.
1990. Meyer, J.L. and R.T. Edwards. Community metabolism along a black water river continuum. Ecology 71:668-677.
1990. Meyer, J.L. Production and utilization of dissolved organic carbon in riverine ecosystems. pp. 281-300 In: E.M. Perdue and E.T. Gjessing (eds.). Organic Acids in Aquatic Ecosystems. John Wiley and Sons.
1990. Mulholland, P.J., C.N. Dahn, M.B. David, D.M. DiToro, T.R. Fisher, H.F. Hemond, I. Kogel-Knabner, M.H. Meybeck, J.L. Meyer, and J.R. Sedell. What are the temporal and spatial variations of organic acids at the ecosystem level? pp. 315-330 In: E.M. Perdue and E.T. Gjessing (eds.). Organic Acids in Aquatic

- Ecosystems. John Wiley and Sons.
1990. Edwards, R.T., J.L. Meyer, and S.G. Findlay. The relative contribution of benthic and suspended bacteria to system metabolism in a low-gradient blackwater river. *Journal of the North American Benthological Society* 9:216-228.
1990. Stream Solute Workshop (including J.L. Meyer). Concepts and methods for assessing solute dynamics in streams. *Journal of the North American Benthological Society* 9:95-119.
1990. Carlough, L.A. and J.L. Meyer. Rates of protozoan bacterivory in three habitats of a southeastern blackwater river. *Journal of the North American Benthological Society* 9:45-53.
1990. Meyer, J.L. A blackwater perspective on riverine ecosystems. *BioScience* 40:643-651.
1990. Munn, N.L. and J.L. Meyer. Habitat-Specific solute retention in two small streams: an intersite comparison. *Ecology* 71:2069-2082.
1990. Edwards, R.T. and J.L. Meyer. Bacterivory by a deposit-feeding mayfly larva (*Stenonema* spp.) *Freshwater Biology* 24:453-462.
1990. Englebrecht, R.S. et al. (including J.L. Meyer). A Review of the U.S.G.S. National Water Quality Assessment Pilot Program. National Academy Press. 152 p.
1991. Leff, L.G. and J.L. Meyer. Biological availability of dissolved organic carbon along the Ogeechee River Continuum. *Limnology and Oceanography* 36:315-323.
1991. Carlough, L.A. and J.L. Meyer. Bacterivory by sestonic protists in a southeastern blackwater river. *Limnology and Oceanography* 36:873-883.
1991. Perlmutter, D.G. and J.L. Meyer. The impact of a stream-dwelling harpacticoid copepod upon detritally-associated bacteria. *Ecology* 72: 2170-2180.
1991. Meyer, J.L. and W.T. Swank. Site overview of Coweeta Hydrologic Laboratory. pp. 46-55 In: Long-term Ecological Research in the United States. LTER Network Publications. Seattle, WA. (editorial review only).
1991. Magee, P. et al. (including J. Meyer). Adapting to the Future: Report of the BBS Task force Looking to the 21st Century. National Science Foundation. 112 p. (editorial review only).
1992. Webster, J.R., S.W. Golladay, E.F. Benfield, J.L. Meyer, W.T. Swank and J.B. Wallace. Catchment disturbance and stream response: An overview of stream research at Coweeta Hydrologic Laboratory. pp. 231-253 In: P.J. Boon, P. Calow and G.E. Petts (eds). *The Conservation and Management of Rivers*. John Wiley and Sons.
1992. Meyer, J.L. and W.M. Pulliam. Modification of terrestrial-aquatic interactions by climate. pp. 177-191, In: P. Firth and S. Fisher (eds.) *Global Warming and Freshwater Systems*. Springer Verlag.
1992. Pulliam, W.M. and J.L. Meyer. Methane emissions from floodplain swamps of the Ogeechee River: long-term patterns and effects of climate change. *Biogeochemistry* 15:151-174.
1992. Meyer, J.L. Seasonal patterns in water quality in blackwater rivers of the Coastal Plain, Southeastern U.S. pp. 249-276. In: D. Neitzel and D. Becker (eds.) *Water Quality in North American Rivers*. Battelle Press, Columbus OH.
1992. Benke, A.C., F.R. Hauer, D.L. Stites, J.L. Meyer, and R.T. Edwards. Growth of snag-dwelling mayflies in a blackwater river: the influence of temperature and food. *Archiv fur Hydrobiologie* 125:63-81.
1992. Couch, C.A. and J.L. Meyer. Development and composition of the epixylic biofilm in a blackwater river. *Freshwater Biology* 27:43-51.

1992. Wainright, S.C., C.A. Couch, and J.L. Meyer. Fluxes of bacteria and organic matter into a blackwater river from river sediments and floodplain soils. *Freshwater Biology* 28:37-48.
1993. Meyer, J.L. Changing concepts of systems management. pp. 78-91. *Sustaining Our Water Resources*. National Academy Press.
1993. Meyer, J.L. and 8 others. Stream Research in the LTER Network. LTER Network Office, University of Washington, Seattle, WA. 114 p.
1993. National Research Council (including J.L. Meyer). A Biological Survey for the Nation. National Academy Press. 205 p.
1993. Sabater, F., J.L. Meyer, and R.T. Edwards. Longitudinal patterns of dissolved organic carbon concentration and suspended bacterial density along a blackwater river. *Biogeochemistry* 21:73-93.
1993. D'Angelo, D.J., J.R. Webster, S.V. Gregory and J.L. Meyer. Transient storage in Appalachian and Cascade mountain streams as related to hydraulic characteristics. *Journal of the North American Benthological Society* 12:223-235.
1993. Meyer, J.L. and G.S. Helfman. The ecological basis of sustainability. *Ecological Applications* 3:569-571.
1994. Meyer, J.L., M.H. Beare, P. Saunders and R.R. Lowrance. Effects of aldicarb on microbial processes in riparian soils. pp. 324-336 In: *Riparian Ecosystems in the Humid U.S.* National Association of Conservation Districts. Conference Proceedings.
1994. Beare, M.H., R.R. Lowrance and J.L. Meyer. Biotic regulation of nitrate depletion in a Coastal Plain riparian forest: Experimental approach and preliminary results. pp. 388-397 In: *Riparian Ecosystems in the Humid U.S.* National Association of Conservation Districts. Conference Proceedings.
1994. Meyer, J.L. The dance of nature: New concepts in ecology. *Chicago Kent Law Review* 69(4):875-886. Reprinted in R. Rosenberg. 2001. *Environmental Policy Law: Problems, Cases and Readings*. Foundation Press.
1994. Meyer, J.L. The microbial loop in flowing waters. *Microbial Ecology* 28:195-199.
1994. Leff, L.G., J.V. McArthur, J.L. Meyer, L. Shimkets. The effect of macroinvertebrates on detachment of bacteria from biofilms in a stream. *Journal of the North American Benthological Society* 13(1):74-79.
1994. Yeakley, J.A., J.L. Meyer, W.T. Swank. Hillslope nutrient flux during a near-stream vegetation removal: a multi-scaled modeling approach. *Water, Air, and Soil Pollution* 77: 229-246.
1995. D'Angelo, D.J., L.M. Howard, S.V. Gregory, J.L. Meyer, L.R. Ashkenas, Ecological uses for genetic algorithms: predicting fish distribution in complex physical habitats. *Canadian Journal of Fisheries and Aquatic Sciences* 52:1893-1908.
1995. Wohl, D., J.B. Wallace, and J.L. Meyer. Benthic macroinvertebrate community structure, function, and productivity with respect to spatial scale in the Southern Appalachians (USA). *Freshwater Biology* 34:447-464.
1995. Wallace, J.B., J.R. Webster, and J.L. Meyer. The influence of log additions on physical and biotic characteristics of a mountain stream. *Canadian Journal of Fisheries and Aquatic Sciences* 52:2120-2137.
1996. J. L. Meyer and W.T. Swank. Ecosystem management: Challenges for ecologists. *Ecological Applications* 6(3):738-740.
1996. Couch, C. A., J. L. Meyer and R. O. Hall Jr. Incorporation of bacterial extracellular polysaccharide by blackfly larvae (Simuliidae). *Journal of the North American Benthological Society* 15:289-299.

1996. Barnes, K., J. L. Meyer and B. J. Freeman. Suspended sediments and Georgia's fishes: an analysis of existing information. ERC 02-96. Environmental Resources Center. Georgia Institute of Technology. Atlanta, GA 30332.
1996. Hall, R.O., C. Peredney, and J.L. Meyer. The effect of invertebrate consumption on bacterial transport in a mountain stream. *Limnology and Oceanography* 41(6):1180-1187.
1996. Meyer, J.L. Forest ecosystem: Streams. pp. 5-6 In: McGraw Hill Encyclopedia of Science and Technology. McGraw Hill Publishers.
1996. Potter, R.L., R.R. Lowrance, J.L. Meyer. Forested riparian wetlands as N sinks in agricultural landscapes of the southeastern U.S. coastal plain. pp. 203-207 In: Flynn, K.M. (ed.). Proceedings of the Southern Forested Wetlands Ecology and Management Conference. Consortium for Research on Southern Forested Wetlands, Clemson University, Clemson, SC. 332 pp.
1996. Paul, M.J. and J.L. Meyer. Fungal biomass of 3 leaf litter species during decay in an Appalachian stream. *Journal of the North American Benthological Society* 15(4):421-432.
1996. Meyer, J.L. Beyond gloom and doom: Ecology for the future. *Bulletin of the Ecological Society of America* 77: 199-205.
1997. Meyer, J.L. Conserving ecosystem function. pp. 136-145 In: R.S. Ostfeld and S.T. A. Pickett (eds.). *The Ecological Basis of Conservation: Heterogeneity, Ecosystems, and Biodiversity*. Chapman and Hall Publishers.
1997. Webster, J.R. and J.L. Meyer (editors). Stream organic matter budgets. *Journal of the North American Benthological Society* 16:3-168.
1997. Webster, J. R. and J. L. Meyer. Stream organic matter budgets- introduction. *Journal of the North American Benthological Society* 16(1):5-13.
1997. Webster, J.R., J.L. Meyer, J.B. Wallace, and E.F. Benfield. Organic matter dynamics in Hugh White Creek, Coweeta Hydrologic Laboratory, North Carolina. *Journal of the North American Benthological Society* 16(1):74-77.
1997. Meyer, J.L., A.C. Benke, J.B. Wallace, and R.T. Edwards. Organic matter dynamics in the Ogeechee River, a blackwater river in Georgia, U.S.A. *Journal of the North American Benthological Society* 16(1):82-87.
1997. Webster, J. R. and J. L. Meyer. Organic matter budgets for streams: a synthesis. *Journal of the North American Benthological Society* 16(1):141-161.
1997. Mulholland, P.J. and 9 others (including J. Meyer). Effects of climate change on freshwaters of region 5, southeastern U.S. and Gulf Coast of Mexico. *Hydrologic Processes*, Vol. II, 949-970.
1997. Wallace, J. B., S. L. Eggert, J. L. Meyer and J. R. Webster. Multiple trophic levels of a stream linked to terrestrial litter inputs. *Science* 277: 102-104.
1997. Meyer, J.L. 1997. Stream health: incorporating the human dimension to advance stream ecology. *Journal of the North American Benthological Society* 16(2): 439-447.
1997. Sun, L., E.M. Perdue, J.L. Meyer and J. Weis. Using elemental composition to predict bioavailability of dissolved organic matter in a Georgia river. *Limnology and Oceanography* 42: 714-721.
1997. D'Angelo, D. J., S. Gregory, L. Ashkenas and J. L. Meyer. Physical and biological linkages within a stream geomorphic hierarchy: a modeling perspective. *Journal of the North American Benthological Society* 16(3): 480-502.

1997. Committee on Research Opportunities and Priorities for EPA (including Judy Meyer). Building a foundation for sound environmental decisions. National Academy Press.
1998. Meyer, J.L. The changing state of the global environment. pp. 7 - 15 In D. Dahlmeyer and A. Ike (eds.). Environmental Ethics and the Global Marketplace. UGA Press.
1998. Hall, R.O., B.J. Peterson and J.L. Meyer. Testing a nitrogen cycling model of a forested stream using a ^{15}N tracer addition. *Ecosystems* 1: 283 - 298.
1998. Hall, R.O. and J.L. Meyer. The trophic significance of bacteria in a detritus-based stream food web. *Ecology* 79: 1995-2012.
1998. Meyer, J.L., S.L. Eggert and J.B. Wallace. Leaf litter as a source of dissolved organic carbon in streams. *Ecosystems* 1: 240 - 249.
1998. Sutherland, A.B., K.H. Barnes, J.L. Meyer, D.M. Walters, and B.J. Freeman. Effects of sedimentation on biodiversity in southern Appalachian rivers and streams. Technical Completion Report. ERC-01-98. Environmental Resources Center. Georgia Institute of Technology.
1999. Burke, R.A., J.L. Meyer, J.M. Cruse, K.M. Birkhead, and M.J. Paul. Soil-atmosphere exchange of methane in adjacent cultivated and floodplain forest soils. *Journal of Geophysical Research* 104: 8161 - 8171.
1999. Wallace, J.B., S.L. Eggert, J.L. Meyer, and J.R. Webster. Effects of resource limitation on a detrital-based ecosystem. *Ecological Monographs* 69: 409 - 442.
1999. Meyer, J., A. Sutherland, K. Barnes, D. Walters, and B. Freeman. A scientific basis for erosion and sedimentation standards in the Blue Ridge Physiographic province. Pp. 321 - 324 in K.J. Hatcher (ed.), Proceedings of the 1999 Georgia Water Resources Conference.
1999. Meyer, J.L., M.J. Sale, P.J. Mulholland, and N.L. Poff. Impacts of climate change on aquatic ecosystem functioning and health. *Journal of the American Water Resources Association* 35: 1373 - 1386.
1999. Sutherland, A., J.L. Meyer and N. Gardiner. Effects of land-use change on sediment transport and fish assemblage structure in southern Appalachian streams. Pp. 318 - 320 in K.J. Hatcher (ed.), Proceedings of the 1999 Georgia Water Resources Conference
2000. Mulholland, P.J., J.L. Tank, D.M. Sanzone, W.M. Wollheim, B.J. Peterson, J.R. Webster, and J.L. Meyer. Nitrogen cycling in a deciduous forest stream determined by a tracer ^{15}N addition. *Ecological Monographs* 70: 471-493.
2000. Mulholland, P.J., J.L. Tank, D.M. Sanzone, W.M. Wollheim, B.J. Peterson, J.R. Webster, and J.L. Meyer. Food resources of stream macroinvertebrates determined by natural-abundance stable C and N isotopes and a ^{15}N tracer addition. *Journal of the North American Benthological Society* 19: 145 - 157.
2000. Tank, J.L., J.L. Meyer, D.M. Sanzone, P.J. Mulholland, J.R. Webster, B.J. Peterson, W.W. Wolheim, and N.E. Leonard. Analysis of nitrogen cycling in a forest stream during autumn using a ^{15}N tracer addition. *Limnology and Oceanography* 45: 1013-1029.
2001. Mullholland, P.J., J.L. Tank, D.M. Sanzone, J.R. Webster, W.M. Wolheim, B.J. Peterson, and J.L. Meyer. Ammonium and nitrate uptake lengths in a small forested stream determined by ^{15}N tracer and short-term nutrient enrichment experiments. Proceedings of the International Association of Theoretical and Applied Limnology 27:1320 - 1325.
2001. Webster, J.R., J.L. Tank, J.B. Wallace, J.L. Meyer, S.L. Eggert, T.P. Ehrman, B.R. Ward, B.L. Bennett, P.F. Wagner, and M.E. McTammany. Effects of litter exclusion and wood removal on phosphorus and nitrogen

- retention in a forest stream. *Proceedings of the International Association of Theoretical and Applied Limnology* 27:1337 - 1340.
2001. Wallace, J.B., J.R. Webster, S.L. Eggert, and J.L. Meyer. Small wood dynamics in a headwater stream. *Proceedings of the International Association of Theoretical and Applied Limnology* 27: 1361 - 1365.
2001. Meyer, J.L., C. Hax, J.B. Wallace, S.L. Eggert, and J.R. Webster. Terrestrial litter inputs as determinants of food quality of organic matter in a forest stream. *Proceedings of the International Association of Theoretical and Applied Limnology* 27: 1346 - 1350.
2001. Peterson, B.J., W. Wolheim, P.J. Mulholland, J.R. Webster, J.L. Meyer, J.L. Tank, N.B. Grimm, W.B. Bowden, H.M. Valett, A.E. Hershey, W.B. McDowell, W.K. Dodds, S.K. Hamilton, S. Gregory and D.J. Morrall. Stream processes alter the amount and form of nitrogen exported from small watersheds. *Science* 292: 86-90.
2001. Meyer, J.L. and J.B. Wallace. Lost linkages and lotic ecology: rediscovering small streams. Pp. 295-317. In: M.C. Press, N. Huntly and S. Levin (eds.) *Ecology: Achievement and Challenge*. Blackwell Science.
2001. Wallace, J.B., J.R. Webster, S.L. Eggert, J.L. Meyer, and E.R. Siler. Large woody debris in a headwater stream: Long-term legacies of forest disturbance. *Internationale Revue Hydrobiologie* 86: 501-513.
2001. Gibson, C.A. and J.L. Meyer. Ecosystem services in a regulated river: Variability in nutrient uptake and net ecosystem metabolism in the Chattahoochee River. Pp. 502-505 In. K.J. Hatcher. *Proceedings of the Georgia Water Resources Conference, University of Georgia, Athens GA*.
2001. Pollock, J.B. and J.L. Meyer. Phosphorus assimilation below a point source in Big Creek. Pp. 502-505 In. K.J. Hatcher. *Proceedings of the Georgia Water Resources Conference, University of Georgia, Athens GA*.
2001. Rosi-Marshall, E.J., J.L. Meyer, K. Neumann and B. Lyons. Defining away metal contamination in Georgia streams. Pp. 549-552 In. K.J. Hatcher. *Proceedings of the Georgia Water Resources Conference, University of Georgia, Athens GA*.
2001. Paul, M.J. and J.L. Meyer. Streams in the urban landscape. *Annual Review of Ecology and Systematics* 32: 333 - 366.
2001. Swank, W.T., J.L. Meyer, and D.A. Crossley. Long-term ecological research: Coweeta history and perspective. In G.W. Barrett and T.L. Barrett, *Holistic Science: The Evolution of the Georgia Institute of Ecology (1940-2000)*. Taylor and Francis.
2001. Schofield, K.A., C.M. Pringle, J.L. Meyer and A.B. Sutherland. The role of crayfish in the seasonal breakdown of rhododendron leaf litter. *Freshwater Biology* 46: 1191 -1204.
2001. Tank, J.L., P.J. Mulholland, J.L. Meyer, W.B. Bowden, J.R. Webster, and B.J. Peterson. Contrasting food web linkages for the grazing pathway in three temperate forested streams using ¹⁵N as a tracer. *Proceedings of the International Association of Theoretical and Applied Limnology* 27:2832-2835.
2001. Sanzone, D.M., J.L. Tank, J.L. Meyer, P.J. Mulholland, and S.E.G. Findlay. Microbial incorporation of nitrogen in stream detritus. *Hydrobiologia* 464: 27-35.
2002. Rosemond, A.D., C.M. Pringle, A. Ramirez, M.J. Paul and J.L. Meyer. Landscape variation in phosphorus concentration and effects on detritus-based tropical streams. *Limnology and Oceanography* 47: 278-289.
2002. Dodds, W.K., A.J. Lopez, W.B. Bowden, S. Gregory, N.B. Grimm, S.K. Hamilton, A.E. Hershey, E. Marti, W.H. McDowell, J.L. Meyer, D. Morrall, P.J. Mulholland, B.J. Peterson, J.L. Tank, H.M. Valett, J.R. Webster and

- W. Wollheim. Nutrient uptake as a function of concentration in streams. *Journal of the North American Benthological Society* 21: 206 - 220.
2002. Heinz Center. State of the Nation's Ecosystems. Cambridge University Press. JM was part of the group that wrote the section on freshwater ecosystems.
2002. Cowie, G. et al. including J. Meyer. 2002. Reservoirs in Georgia: Meeting Water Supply Needs While Minimizing Impacts. UGA River Basin Science and Policy Center.
2002. Sutherland, A., J.L. Meyer, and E.P. Gardiner. Effects of land cover on sediment regime and fish assemblage structure in four Southern Appalachian streams. *Freshwater Biology* 47: 1791-1805.
2002. Mulholland, P.J., J.L. Tank, J.R. Webster, W.B. Bowden, W.K. Dodds, S.V. Gregory, N.B. Grimm, S.K. Hamilton, S.L. Johnson, E. Marti, W.H. McDowell, J. Merriam, J.L. Meyer, B.J. Peterson, H.M. Valett, and W.M. Wollheim. Can uptake length in streams be determined by nutrient addition experiments? Results from an inter-biome comparison study. *Journal of the North American Benthological Society* 21: 544-560.
2003. Gibson, C. and J.L. Meyer. Ammonium uptake in urban and forested headwater streams. Proceedings of the 2003 Georgia Water Resources Conference, held April 23-24, 2003, at the University of Georgia, Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2003. Herbert, S., L. England, J. Buesching, J. Crowley, J. Meyer and the Summer 2002 Design Studio. Tanyard Branch: demonstrating an interdisciplinary approach to the design phase of an urban stream restoration. Proceedings of the 2003 Georgia Water Resources Conference, held April 23-24, 2003, at the University of Georgia, Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2003. Jones, K., G. Poole and J. Meyer. Relating species richness, upland coldwater fish species, and temperature in North Georgia trout streams. Proceedings of the 2003 Georgia Water Resources Conference, held April 23-24, 2003, at the University of Georgia, Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2003. Loeffler, G., J.L. Meyer, H. Trammell and S. Holmbeck-Pelham. Fish consumption along the Upper Chattahoochee River. Proceedings of the 2003 Georgia Water Resources Conference, held April 23-24, 2003, at the University of Georgia, Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2003. Palmer, M.A., and 23 others (including J. Meyer). Bridging engineering, ecological and geomorphic science to enhance riverine restoration: local and national efforts. Proceedings of A National Symposium on Urban and Rural Stream Protection and Restoration, EWRI World Water and Environmental Congress, Philadelphia, Pa, June 2003, published by the American Society of Civil Engineers, Reston Va.
2003. Poff, N.L., J.D. Allan, M. Palmer, D.D. Hart, B.D. Richter, A.H. Arthington, K.H. Rogers, J.L. Meyer, and J. A. Stanford. River flows and water wars: emerging science for decision-making. *Frontiers in Ecology* 1: 298-306.
2003. Sanzone, D.M., J.L. Meyer, E. Marti, E.P. Gardiner, J.L. Tank, and N.B. Grimm. Carbon and nitrogen transfer from a desert stream to riparian predators. *Oecologia* 134: 238-250.
2003. Sudduth, E.B., J.L. Meyer, M.A. Palmer, J.D. Allan, E.S. Bernhardt and the National Riverine Restoration Science Synthesis Working Group. Placing stream restoration in Georgia in a national perspective. Proceedings of the 2003 Georgia Water Resources Conference, held April 23-24, 2003, at the University of Georgia, Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2003. Webster, J.R. and 19 co-authors including J.L. Meyer. Factors affecting ammonium uptake in streams -- an inter-biome perspective. *Freshwater Biology* 48: 1329-1352.
2003. Yeakley, A., D.C. Coleman, B.L. Haines, B. Kloeppel, J.L. Meyer, W.T. Swank, B.W. Argo, J. Deal, and S.F. Taylor. Hillslope nutrient dynamics

- following upland and riparian vegetation disturbance. *Ecosystems* 6: 154-167.
2003. Meyer, J.L. and 10 others. Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands. American Rivers and Sierra Club. URL: www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182
2004. Rosi-Marshall, E. and J.L. Meyer. Quality of suspended fine particulate matter along a river continuum. *Hydrobiologia* 519: 29-37.
2004. Schofield, K.A., C.M. Pringle, J.L. Meyer. Effects of increased bedload on algal and detrital-based stream food webs: experimental manipulation of sediment and macroconsumers. *Limnology and Oceanography* 49:900-909
2005. Meyer, J.L. Heterogeneity and ecosystem function: enhancing ecological understanding and applications. Pages xx - xx in G. Lovett, C. Jones, M.G. Turner, and K.C. Weathers., editors. *Ecosystem function in heterogeneous landscapes*. Springer-Verlag, New York.
2005. Wilcox, H.S., J.B. Wallace, J.L. Meyer and J.F. Benstead. Effects of dextrose addition on a headwater stream food web. *Limnology and Oceanography* 50.
2005. Roy, A.H., M.C. Freeman, B.J. Freeman, S.J. Wenger, W.E. Ensign and J.L. Meyer. Investigating hydrologic alteration as a mechanism of fish assemblage shifts in urbanizing streams. *Journal of the North American Benthological Society* 24.
2005. Meyer, J.L., M.J. Paul and W.K. Taulbee. Stream ecosystem function in urbanizing landscapes. *Journal of the North American Benthological Society* 24:602-612.
2005. Bernhardt, E. and 13 others including J.L. Meyer. Can't see the forest for the stream? The capacity of in-stream processing to modify terrestrial nitrogen exports. *BioScience* 55: 219-230.
2005. Meyer, J.L., G.C. Poole, and K.L. Jones. Buried alive: potential consequences of burying headwater streams in drainage pipes. Proceedings of the 2005 Georgia Water Resources Conference, held April 25-27, 2005, at the University of Georgia. Kathryn J. Hatcher, editor, Institute of Ecology, The University of Georgia, Athens Georgia.
2005. Gibson, C.A, J.L. Meyer, N. L. Poff, L.E. Hay and A. Georgakakos. Flow regime alterations under changing climate in two river basins: Implications for freshwater ecosystems. *River Research and Applications* 21: 1-16.
2005. Palmer, M.A. and 22 others including J.L. Meyer. Standards for ecologically successful river restoration. *Journal of Applied Ecology* 42:208-217.
2005. Roy, A.H., C.L. Faust, M.C. Freeman and J.L. Meyer. 2005. Reach-scale effects of riparian forest cover on urban stream ecosystems. *Canadian Journal of Fisheries and Aquatic Sciences* 62: 2312-2329.
2005. Bernhardt, E. and 25 others including J.L. Meyer. Synthesizing U.S. River Restoration Efforts. *Science* 308: 636-637.
2006. Richter, B.D., A.T. Warner, J.L. Meyer and K. Lutz. A collaborative and adaptive process for developing environmental flow recommendations. *River Research and Applications* 22: 297-318.
2006. Roy, A.H., M.C. Freeman, B.J. Freeman, S.J. Wenger, W.E. Ensign, and J.L. Meyer. Importance of riparian forests in urbanizing watersheds contingent on sediment and hydrologic regimes. *Environmental Management* 37: 523-539.
2006. Paul, M.J., J.L. Meyer and C.A. Couch. Leaf breakdown in streams differing in catchment land use. *Freshwater Biology* 51: 1684-1695.
2006. Sudduth, E.B. and J.L. Meyer. Effects of bioengineered streambank stabilization on bank habitat and macroinvertebrates in urban streams. *Environmental Management* 38: 218 - 226.
2006. Jones, K.L., G. Poole, J.L. Meyer, E. Kramer, and W. Bumback. Quantifying expected ecological response to natural resource legislation: a case study of riparian buffers, aquatic habitat, and trout populations. *Ecology and Society* 11(2): 15. URL: <http://www.ecologyandsociety.org/vol11/iss2/art15>
2007. Meyer, J.L., D.L. Strayer, J.B. Wallace, S.L. Eggert, G.S. Helfman, and N.L. Leonard. The contribution of headwater streams to biodiversity in river networks. *Journal of the American Water Resources Association* 43(1): 86 - 103.

2007. Sutherland, A.B. and J.L. Meyer. Effects of increased suspended sediment concentration on growth rate and gill condition of two southern Appalachian minnows. *Environmental Biology of Fishes* 80(4): 389-403.
2007. Sudduth, E.B., J.L. Meyer, and E. Bernhardt. Stream restoration practices in the southeastern US. *Restoration Ecology* 15(3): 573-583..
2007. Gibson, C.A. and J.L. Meyer. Nutrient uptake in a large urban river. *Journal of the American Water Resources Association* 43(3): 574-587.
2007. Palmer, M.A., J.D. Allan, J.L. Meyer and E.S. Bernhardt. River restoration in the 21st century: data and experiential knowledge to inform future efforts. *Restoration Ecology* 15(3): 472-481.
2007. Bernhardt, E.S., E.B. Sudduth, M.A. Palmer, J.D. Allan, J.L. Meyer, G. Alexander, J. Follstad-Shah, B. Hassett, R. Jenkinson, R. Laye, J. Rumps, and L. Pagano. Restoring rivers one reach at a time: results from a survey of U.S. river restoration practitioners. *Restoration Ecology* 15(3): 482-493.
2008. Peltier, G.L., J.L. Meyer, C.H. Jagoe, and W.A. Hopkins. Using trace element concentrations in *Corbicula fluminea* to identify potential sources of contamination in an urban river. *Environmental Pollution* 154: 283-290.
2008. Mulholland, P.J. and 30 authors including J.L. Meyer. Stream denitrification across biomes and its response to anthropogenic nitrogen loading. *Nature* 452: 202-205.
2008. Dale, V. H. and 20 others including J.L. Meyer. Enhancing the ecological risk assessment process. *Integrated Environmental Assessment and Management* 4(3): 306-313.
2008. Schofield, K.A., C.M. Pringle, J.L. Meyer and E.J. Rosi-Marshall. Functional redundancy of stream macroconsumers despite watershed land use-related differences. *Freshwater Biology* 53:2587- 2599.
2009. Gardiner, E.P., A.B. Sutherland, R.J. Bixby, M.C. Scott, J.L. Meyer, G.S. Helfman, E.F. Benfield, C.M. Pringle, P.V. Bolstad, and D.N. Wear. Linking stream and landscape trajectories in the Southern Appalachians. *Environmental Monitoring and Assessment* 156: 17-36.
2009. Hall, R.J and 29 authors including J.L. Meyer. Nitrate removal in stream ecosystems measured by ¹⁵N addition experiments: Total uptake. *Limnology and Oceanography* 54:653-665.
2009. Mulholland, P.J. and 31 authors including J.L. Meyer. Nitrate removal in stream ecosystems measured by ¹⁵N addition experiments: Denitrification. *Limnology and Oceanography* 54: 666-680.
2009. Duncan, W.W., G.C. Poole, and J.L. Meyer. Large channel confluences influence geomorphic heterogeneity of a southeastern United States river. *Water Resources Research* 45, W10405, doi:10.1029/2008WR007454.
2009. Wenger, S. and 18 others including J.L. Meyer. Twenty-six key research questions in urban stream ecology: an assessment of the state of the science. *Journal of the North American Benthological Society* 28: 1080-1098.
2010. Steinman, A.D., P. Silver, S. Fisher, and J. L. Meyer. The J-NABS 25th anniversary issue: reflecting on the past, synthesizing the present, and projecting into the future. *Journal of the North American Benthological Society* 29: 372-380.
2010. Dale, V.H., C. Kling, J.L. Meyer and 21 others. *Hypoxia in the Northern Gulf of Mexico*. Springer, New York.
- In press. Peltier, G.L., M.S. Wright, W.A. Hopkins, J.L. Meyer. Accumulation of trace elements and growth responses in *Corbicula fluminea* downstream of a coal-fired power plant. *Ecotoxicology and Environmental Safety*.
- In press. Helton, A.M., G.C. Poole, J.L. Meyer and 20 others. Thinking outside the channel: Modeling nitrogen cycling in networked river ecosystems. *Frontiers in Ecology and the Environment*.
- In press. Bernot, M.J. and 32 authors including J.L. Meyer. Inter-regional comparison of land-use effects on stream metabolism. *Freshwater Biology*.
- In press. Meyer, J.L., J.R. Webster, J. Knoepp and E.F. Benfield. Dynamics of dissolved organic carbon in a stream during a quarter century of forest succession. In W.T. Swank and J.R. Webster (eds.) *Long-term response of a forest watershed ecosystem: clearcutting in the Southern Appalachians*. Springer, New York.

- Submitted. Meyer, J.L., P.C. Frumhoff, S.P. Hamburg, and C. de la Rosa. Above the din but in the fray: environmental scientists as effective advocates. *Frontiers in Ecology and the Environment*.
- Submitted. Palta, M.M., T.W. Doyle, C.R. Jackson, J.L. Meyer, and R.R. Sharitz. Changes in diameter growth of *Taxodium distichum* (L.) Rich in response to flow alterations in the Savannah River. *River Research and Applications*.

INVITED SEMINARS AND CHAIRED SESSIONS

This listing does not include authorship on over 200 contributed papers presented at meetings of the Ecological Society of America, American Society for Limnology and Oceanography, North American Benthological Society, American Geophysical Union, American Society of Ichthyologists and Herpetologists, and International Association of Theoretical and Applied Limnology

- 1978. Organized and chaired a one-day symposium on stream ecosystems for annual meeting of Ecological Society of America.
- 1978. Meyer, J. Phosphorus dynamics in streams. Invited Seminar, Ecology Program, Univ. of South Carolina, Columbia, SC.
- 1980. Meyer, J. DOC dynamics in streams: a clearcut approach. Zoology Department Seminar, UGA, Athens, GA.
- 1981. Chaired a symposium on Freshwater Ecology for State-of-the-Art in Biology Symposium, University of Georgia, Athens, GA.
- 1981. Meyer, J. DOC dynamics in streams: a clearcut approach. Invited seminar, Ecology Program, Univ. of Tennessee, Knoxville, Tenn.
- 1982. Meyer, J. DOC dynamics in streams. Invited seminar, School of Biology, Georgia Tech, Atlanta, Georgia.
- 1982. Chaired a contributed papers session at North American Benthological Society Annual Meeting, Ann Arbor, Mich.
- 1982. Chaired a contributed papers session at Ecological Society of America Annual Meeting with AIBS, State College, Penn.
- 1983. Chaired a contributed papers session at North American Benthological Society Annual Meeting, La Crosse, Wis.
- 1983. Dynamics of dissolved organic carbon in southeastern rivers and streams. Invited seminar in Environmental Geochemistry of Surface Waters series, Ga. Tech., School of Geophysical Sciences.
- 1984. Fishes as a source of nutrients for coral reefs. Invited seminar, University of Delaware.
- 1984. Metabolism of black water rivers. Invited seminar, University of Delaware.
- 1984. The role of fungi in detritivore nutrition (with S. Findlay). Invited paper. American Society for Microbiology, St. Louis, Missouri.
- 1984. Metabolism of a southeastern blackwater river. Invited paper. North American Benthological Society, Raleigh NC (with R. Edwards).
- 1984. The role of bacteria in blackwater rivers. Invited seminar, UGA Biochemistry Dept.
- 1984. The trophic significance of DOC in streams. Invited paper in 50th Anniversary Symposium on Coweeta research. Athens, GA.
- 1985. Processes regulating DOC concentration and quality in a

- blackwater river. Invited symposium paper, Ecological Society of America, Minneapolis, MN.
1985. Natural detritus as a growth substrate for microbes. Invited symposium paper, Ecological Society of America, Minneapolis MN (with S. Findlay).
1985. Invited participant in Cary Symposium on Status and Future of Ecosystem Research.
1985. Contribution of bacterial and fungal biomass to carbon requirements of two detritivores. Invited paper, North American Benthological Society, Corvallis OR (with S. Findlay and P. Smith)
1986. Microbial food web of a subtropical blackwater river. Invited paper, American Society of Limnology and Oceanography, New Orleans, LA.
1986. Chaired session at International Ecological Congress/Ecological Society of America, Syracuse, NY.
1987. Meyer, J. Benthic bacterial biomass and production in a blackwater river. International Assoc. of Theoretical and Applied Limnology. Hamilton, New Zealand. Invited paper.
1987. Benke, A. and J. Meyer. Structure and function of a blackwater river in the southeastern U.S.A. International Assoc. of Theoretical and Applied Limnology. Hamilton, New Zealand. Invited paper.
1987. Chaired session at North American Benthological Society Annual Meeting, Orono, ME.
1987. Chaired session at Association of Southeastern Biologists, Annual Meeting. Athens, GA.
1987. Trophic structure of low-gradient river-floodplain ecosystems. Invited seminar, Zoology Dept., University of Tasmania, Hobart, Tasmania, Australia.
1987. Seasonal patterns in water quality of southeastern blackwater rivers. Invited symposium paper, American Fisheries Society. Winston-Salem, N.C.
1987. The microbial food web in a blackwater river. Invited seminar. Savannah River Ecology Laboratory.
1987. Member steering committee and chairman of working group on Materials Transfer in Streams for NSF-sponsored workshop. Flathead Lake, Montana.
1988. Chaired a symposium on Georgia biomes, honoring E.P. Odum at State of the Art in Biology, Athens, GA.
1988. Invited participant in EPA-sponsored workshop on the role of organic acids in surface water acidification.
1988. Benthic bacteria and the microbial food loop in streams. Invited paper in symposium. North American Benthological Society.
1988. Availability of DOC to bacteria in a blackwater river. Invited paper in symposium. American Society of Limnology and Oceanography.
1988. The microbial food web of a blackwater river. Invited seminar. Institute for Ecosystem Studies, Millbrook, New York.
1988. Trophic dynamics in a blackwater river. Hydrobiology seminar, UGA.
1988. Microbial food web of a blackwater river. Carolina Area Benthological Workshop.
1988. Invited to present one of the keynote papers (Future directions in lotic ecology): in NSF-sponsored workshop on the role of women in the future of ecosystem science.

- 1989. Invited to attend and present one of the background papers at a Dahlem Conference on The Role of Organic Acids in Aquatic Ecosystems (Berlin, May 1989).
- 1989. Foodweb of Georgia's blackwater rivers. Lyceum series on The Georgia Wetlands, Clayton State College, Morrow, GA.
- 1989. Microbial food web of a blackwater river. Biology Dept. Virginia Tech, Blacksburg, VA.
- 1989. Solute dynamics in streams. Zoology Dept., Monash University, Melbourne, Australia.
- 1989. Microbial food web of a blackwater river. Stream Ecology Centre, Chisholm Institute of Technology, Melbourne, Australia.
- 1989. Impact of floodplains on riverine ecosystem function. Invited paper in symposium, North American Benthological Society.
- 1989. Invited participant in Cary Conference on Comparative Studies of Ecosystems. Institute for Ecosystem Studies, Millbrook, NY.
- 1989. Invited presentation at ESA Workshop on setting research agenda for ecology in the 1990's. ESA Annual Meeting. (August, 1989).
- 1990. Microbial food web of a blackwater river. Biology Dept., U of Alabama, Tuscaloosa, AL.
- 1990. Microbial food web of a blackwater river. Ecology Program. U of North Carolina, Chapel Hill, NC.
- 1990. Stream research in The LTER Network. Plenary address to All-Scientist's meeting at Estes Park. CO.
- 1990. Modification of terrestrial-aquatic interactions by climate. Climate-Change Symposium, North American Berthological Society.
- 1990. Ecosystem function in non-equilibrium systems. Symposium at Ecological Society of America Annual Meeting, Snowbird, UT. (This was written up in the Science Section of the New York Times.)
- 1991. Ecological consequences of preparation for war. Environmental Ethics Seminar, UGA.
- 1991. Organized invited papers session, Stream Research in the LTER Network, North American Benthological Society, Santa Fe NM.
- 1991. Microbial foodweb of a blackwater river. Invited seminar, Georgia Southern University, Statesboro GA.
- 1991. Leader of discussion session, Risk Assessment Workshop, National Academy of Sciences / National Research Council Board on Environmental Studies and Toxicology, Ayrlie House, VA.
- 1991. Stream Research at Coweeta Hydrologic Laboratory. Invited Seminar, Forestry School, University of Washington. Seattle, WA.
- 1991. Ecological Studies in a Blackwater River: Why Bother? Zebra seminar for Zoology Department, UGA.
- 1991. Long-term patterns of dissolved organic carbon concentration in streams draining a clearcut and a reference catchment in the Southern Appalachians. American Geophysical Union Annual Meeting, San Francisco, CA.
- 1992. Importance of bacteria as a food resource for aquatic insects. Entomology Department, UGA
- 1992. Synthesis of stream research in the LTER network. LTER Coordinating Committee Meeting, Trout Lake Biological Station, Wisconsin.
- 1992. Through a river darkly: a blackwater perspective on riverine ecosystems. Invited seminar, Center for the Analysis of Environmental Change, Oregon State University, Corvallis, OR.

- 1992. Testimony on a rivers bill. Subcommittee on Energy and Environment, Committee on Interior and Insular Affairs, U.S. House of Representatives.
- 1992. Natural Resource Assessment and Management, Invited plenary speaker, University System Symposium on Research, Athens, GA.
- 1992. Organized workshop on LTER Stream Research at NABS meeting, Louisville, KY.
- 1992. Spatial patterns of metabolism and biogeochemistry in a blackwater river. Invited speaker, Seventh Annual US Landscape Ecology Symposium, Oregon State University, Corvallis, OR.
- 1992. Changing concepts of systems management. Invited speaker, Tenth Anniversary Symposium of Water Science and Technology Board, National Research Council/National Academy of Sciences. Washington D.C.
- 1993. Rapporteur. NSF-funded workshop on the Freshwater Imperative. Friday Harbor, Washington.
- 1993. Organized workshop on Organic Matter Dynamics in Streams, North American Benthological Society Annual Meeting, Calgary, Alberta, Canada.
- 1993. River-watershed connections. American Rivers Conference. Washington DC.
- 1993. Ecological Engineering: It's Potential Contribution to Sustainability. SCOPE Symposium, National Academy of Sciences, Washington, DC.
- 1993. Long-term Ecological Research Along Gradients at Coweeta Hydrologic Lab. Talk during plenary session. LTER All Scientist Meeting, Estes Park, Colorado.
- 1993. New Concepts in Ecology. Environmental Law Symposium. Chicago Kent College of Law. Chicago, Illinois.
- 1993. Microbial loop in flowing waters. International Symposium on the microbial loop. UGA, Athens, Georgia.
- 1994. Role of ecological science in ecosystem management. Center for Ecology. Utah State University, Provo, Utah.
- 1994. Ecological studies along environmental gradients at Coweeta LTER site. Center for Ecology. Utah State University, Provo, Utah.
- 1994. Scale in ecosystem management. Ecosystem Management Workshop, National Academy of Sciences/National Research Council.
- 1994. Opportunities and obligations for ecologists in the 90's. Plenary lecture, Institute of Ecology Graduate Student Symposium, UGA, Athens, Georgia.
- 1994. Ecosystem management: From buzzword to reality. Luncheon speaker, Southern Appalachian Man and the Biosphere Annual Meeting, Hendersonville, North Carolina.
- 1994. Invited participant in Southeastern regional working group for Symposium on Regional Assessment of the Effects of Climate Change on Freshwater Ecosystems.
- 1994. Panel member, The Ethical Management of Nature, Humanities Center Series, Athens, Georgia.
- 1995. Convener (with B. Peterson and D. D'Angelo) of NSF-sponsored workshop on solute dynamics in streams.
- 1995. Conserving ecosystem function. Plenary address at VI Cary Conference, Institute of Ecosystem Studies, Millbrook, New York.
- 1995. The changing state of the global environment. Invited plenary speaker at International Conference on Environmental Ethics and the Global Marketplace. University of Georgia.
- 1995. Invited panelist. National Institute of the Environment Discussion. Odum Lecture Series, Athens, Georgia.
- 1995. What is a Healthy Stream? Plenary Speaker, Savannah River Ecology Laboratory, International Symposium on New Concepts in Stream Ecology.

- 1995. Invited participant, Critical Issues workshop, Union of Concerned Scientists and American Academy of Arts and Sciences.
- 1995. Invited participant, NSF-sponsored workshop at Woods Hole on CO₂ dynamics in aquatic ecosystems.
- 1995. Member, Steering Committee, Biodiversity and the Electric Power Industry, a symposium sponsored by the Electric Power Research Institute.
- 1996. Invited panelist, Ecology/Environmental Education Interface, Odum Lecture Series, Athens, Georgia.
- 1997. Member, Organizing Committee, 1997 Cary Conference.
- 1998. Organized Special Session on Urban Aquatic Ecosystems, ASLO/ESA Annual Meeting, St. Louis, Missouri.
- 1999. National assessment of impacts of climate change on water resources. National Invitational Workshop, Wetlands and Climate Change.
- 1999. Nutrient uptake in streams along a gradient of watershed land use. Invited symposium presentation, North American Benthological Society.
- 1999. Land-water interactions in an urbanizing landscape. Appalachian Environmental Laboratory, Dedication Symposium.
- 2000. Panel member, The Research University in 2020, University of Georgia.
- 2000. Urban streams. Inaugural lecture in Ecology Seminar Series, Duke University.
- 2000. Lost linkages and lotic ecology. Plenary speaker, Millenium Symposium of the British Ecological Society and Ecological Society of America.
- 2000. Synthesis Speaker. American Water Resources Association, Symposium on Ecology and Management of Riparian Ecosystems.
- 2000. In defense of small streams. Plenary Speaker. Georgia Rivers Network Conference.
- 2001. Niewland Lectures at University of Notre Dame.
- 2001. Biodiversity and Ecosystem Function Lecture at University of Texas.
- 2002. Lessons Learned in Interdisciplinary Research. Auburn University.
- 2002. The importance of riparian buffers. Invited presentation to American Water Resources Association and Georgia Water Pollution Control Stormwater Commission, Atlanta GA
- 2003. Conference synthesis: Ecosystem function in heterogeneous landscapes. Tenth Cary Conference, Institute of Ecosystem Studies, Millbrook NY.
- 2003. Award of Excellence in Benthic Science Lecture. Annual Meeting of North American Benthological Society, Athens GA
- 2003. Keynote address at River Symposium. Brisbane, Australia
- 2003. Stream ecosystems in urbanizing landscapes. Colloquium on Life Sciences, Colorado State University, Fort Collins CO
- 2003. Keynote speaker, Symposium on Urban Stream Ecology, Melbourne University, Australia.
- 2004. Small streams make a big difference. Biology Department, Western Carolina University, Cullowee NC
- 2005. Forest-stream linkages in the Southern Appalachian landscape, Stroud Water Research Center, Avondale PA
- 2005. Looking upstream: ecological reflections on water, Awards Banquet, Georgia Chapter of Sigma Xi, Athens GA
- 2005. Advancing upstream: understanding and protecting the birthplaces of rivers, G.W. Minshall Stream Ecology Symposium, Idaho State University, Pocatello ID
- 2005. Headwater streams: small in size but rich in species. Symposium, Annual Meeting of American Water Resources Association, Seattle WA
- 2006. Birthplaces of Rivers, Hynes Lecture, University of New Brunswick, Fredericton, New Brunswick, Canada

- 2006. Presidential Lecture, University of Montana, Missoula, Montana.
- 2007. Plenary Address, North American Benthological Society, Columbia, South Carolina.
- 2009. From hydrographs to humans: evolution of the Coweeta LTER. 75th Anniversary Symposium, Coweeta Hydrologic Laboratory, Dillard, Georgia.
- 2010. Abel Wolman Distinguished Lecture, Water Science and Technology Board, National Research Council, Washington DC.

GRANTS RECEIVED

- The contribution of pomadaspid fishes to nutrient flux on Caribbean patch reefs, NSF Biological Oceanography, P.I., \$56,576 (December 1979-May 1982).
- Effects of perturbation on nutrient circulation in forested watershed ecosystems, NSF Ecosystem Studies, one of 7 co-P.I.'s, \$287,095 (June 1979-November 1980).
- Analysis of spatial relationships between organisms: an NSF equipment proposal, one of 11 Co-P.I.'s, \$34,000
- Long-term ecological research in forested watersheds at Coweeta, NSF Ecosystem Studies, one of 13 Co-P.I.'s, \$1,300,000 (October 1980-October 1985).
- Microbial biomass and activity in two southern blackwater rivers. UGA Research Foundation, P.I., \$2,475 (November 1980-November 1981).
- The biological basis of production in subtropical blackwater rivers. Sub-contract on an NSF proposal, P.I., \$159,362 (July 1981-July 1984).
- Material spiralling in stream ecosystems, subcontract on NSF proposal, P.I., \$16,500 (April 1982-April 1983).
- Radiolabelling microbes and non-living detritus for use in invertebrate feeding studies. UGA Research Foundation, P.I., \$5000 (Feb. 1983-Feb. 1984).
- Role of detritus-associated microbes and non-living detritus in detritivore nutrition. NSF Ecosystem Studies, Co-P.I. with S. Findlay, \$104,000 (July 1983-July 1985).
- The ecological significance of a meiofaunal organism in a stream ecosystem. Dissertation Improvement Grant from NSF. Student: Dan Perlmutter, \$4,114 (Oct. 1984-Mar. 1986)
- Low gradient coastal plain streams: trophic linkages with floodplain swamps and rivers. NSF Ecosystem Studies, P.I., \$372,559 (July 1984-July 1987).
- A cell-sorting facility for the University of Georgia, NSF, one of 16 Co-PI's, \$142,500 (December 1985).
- Comparative Studies of Forested Watersheds at Coweeta Hydrologic Laboratory, North Carolina, NSF LTER Program, one of 8 Co-PI's, \$1,824,937 (Jan. 1986-Dec. 1990). PI, 1990.
- Organic carbon dynamics and trophic pathways in a low-gradient river-floodplain ecosystem. NSF Ecosystem Studies, P.I. \$190,000 (August 1987-1989).
- Oak Ridge Associated Universities. Travel grant to visit El Verde site in Puerto Rico, \$1,330.
- Production of microbial extracellular polysaccharides and their assimilation by stream invertebrates. NSF Dissertation Improvement Grant. Student: Carol Couch, \$7,107 (Dec. 1988 - May, 1990)

- Supplemental funds for organic carbon dynamics and trophic pathways in a low-gradient river-floodplain ecosystem. J.L. Meyer and C. Thomas (Co P.I.'s), NSF Ecosystem Studies Program, \$27,171 (July 1988-July 1990).
- Minimum Standard Installation Technological Capabilities for the Coweeta LTER Project. D.A. Crossley and J.L. Meyer, \$100,368, NSF Ecosystem Studies (August, 1989 - 1990)
- Image Processing Capability for the Coweeta LTER Site. J.L. Meyer and L.R. Boring, NSF. \$50,733 (1990-1991).
- Long-term studies of ecosystem response to disturbance along environmental gradients at Coweeta Hydrologic Laboratory. J.L. Meyer and W.T. Swank (PI's with 14 additional CoPI's), NSF LTER Program, \$3,300,000 (1991-1996).
- Enhanced data management and GIS capability at the Coweeta LTER site. J.L. Meyer, NSF. \$23,775 (1991-1992)
- Effects of forest management on nutrient and pesticide retention in a riparian buffer system. R. Lowrance, J.L. Meyer, M. Beare, D.C. Coleman. USDA Competitive Grants Program, \$198,908 (1991-1993).
- Methane emissions from natural wetlands. J.L. Meyer and R.A. Burke, Jr. (CoPI's), DOE - National Institute for Global Environmental Change, \$56,576 (1992).
- Microbiological Processes and Global Climate Change. J.L. Meyer, W. Steen and D. Lewis, EPA Cooperative Agreement, \$69,258 (1992).
- Direct and indirect effects of resource manipulation on structure and function of a longitudinally-linked ecosystem. J.B. Wallace, J.L. Meyer, and J.R. Webster, NSF. \$795,000 (1992-96).
- Geomorphic complexity as a disturbance modifier. D. D'Angelo, S. Gregory, and J.L. Meyer, NSF. \$200,000 (1992-94).
- Gradient studies at Coweeta Hydrologic Laboratory. J.L. Meyer, Supplemental funding, NSF Long-Term Projects. \$71,811 (1992-1993).
- Ecohydrological modeling at Coweeta Hydrologic Laboratory. J.L. Meyer. USDA Forest Service Cooperative Agreement. \$20,500 (1992-93).
- Long term ecological research at Coweeta Hydrologic Laboratory. J.L. Meyer. Supplemental Funding, NSF Long-term projects. \$56,314 (1993-1994).
- Soil / atmosphere exchange of methane from natural and agriculturally impacted riparian wetlands. J.L. Meyer and R. Burke. National Institute for Global Environmental Change, Department of Energy. \$80,100 (1993-1994).
- Effects of forest management on nutrient and pesticide retention in riparian buffer. R.L. Lowrance and J.L. Meyer. USDA Competitive Grants Program. \$158,613 (1993-1997).
- Use of food web analyses to examine ecosystem response to a detrital resource manipulation. Robert Hall and J.L. Meyer. NSF Dissertation Improvement Grant. \$6,000 (1994-1996).
- Stream studies in Wine Spring Creek basin of Nantahala National Forest. J.B. Wallace and J.L. Meyer. USDA Forest Service Cooperative Agreement. \$50,000 (1992-94).
- Supplement to long-term ecological research at Coweeta Hydrologic Laboratory. Judy L. Meyer (with 14 additional CoPI's). NSF \$56,314 (1993-94).
- Supplement to long-term ecological research at Coweeta Hydrologic Laboratory. Judy L. Meyer (with 14 additional CoPI's). NSF \$87,160 (1994-95).

- Causes and consequences of land-cover change in the Southern Appalachians: supplement to LTER research at Coweeta Hydrologic Laboratory. Judy L. Meyer (with 12 additional CoPI's). NSF \$999,905 (1994-96).
- Research Experience for Undergraduates: Supplement to research along environmental gradients at Coweeta Hydrological Laboratory. Judy L Meyer NSF \$23,750. (1995-96).
- Biodiversity and Sedimentation in Georgia's rivers and streams. Judy. L. Meyer and B.J. Freeman. USGS (subcontract with Georgia Tech.) \$11,000. (1995-96).
- Influences of watershed land use on stream ecosystem structure and function. Judy L. Meyer and Carol Couch. NSF (Water and Watersheds) \$500,000 (1995-98).
- Stream ecosystem response to decoupling terrestrial-aquatic linkages. J. B. Wallace, J. L. Meyer and J. R. Webster. NSF. \$850,000. (1996-2001).
- Nitrogen uptake, retention, and cycling in stream ecosystems: an intersite N15 tracer experiment. J. R. Webster, J. L. Meyer, J. Mullholland, B. J. Peterson (with 12 additional CoPI's). NSF. \$1,300,000 (1996-2000).
- Long-term studies of disturbances as they affect ecological processes in landscapes of the Southern Appalachians. D. C. Coleman and J. Vose (with 20 CoPI's, including J. L. Meyer). NSF LTER Program. \$6,000,000 (1996-2002).
- Effects of sedimentation on biodiversity in rivers and streams of the southeastern United States. J.L. Meyer and B.J. Freeman. USGS (subcontract with Georgia Tech). \$26,000 (1997-1998)
- Effects of metal contamination on Chattahoochee River Foodwebs. B. Lyons and J.L. Meyer. Turner Foundation. \$35,963 (1998 - 2000).
- Water Resource Sector National Assessment of the Potential Consequences of Climate Variability and Change for the United States: Aquatic Ecosystems. J.L. Meyer (subcontract with Georgia Tech) USGS \$37,539 (1998-1999).
- Ecological impacts of water management decisions for the Apalachicola-Chattahoochee-Flint River Basin in a changing climate. J.L. Meyer (subcontract with Georgia Tech) USGS \$17,000.
- The impact of lawn care practices on aquatic ecosystems in suburban watersheds. Armbrust, K. and 8 CoPIs including J. Meyer. EPA Water and Watersheds. \$894,000 (2000 - 2003).
- The impacts of flow regime on ecosystem processes in the Apalachicola-Chattahoochee-Flint River Basin. J.L. Meyer (subcontract with Georgia Tech) USGS \$18,000 (2001-2002).
- Effects of suspended sediment and substrate embeddedness on the reproductive success of a crevice spawning minnow, turquoise shiner (*Cyprinella monacha*). U.S. Fish and Wildlife Service \$24,000 (2001-2005).
- Nitrate uptake and retention in streams: mechanisms and effects of human disturbance from stream reaches to landscapes. P. Mullholland and 12 CoPIs including J. Meyer. \$3,000,000 NSF (2001-2006)
- Trout stream buffer monitoring project. J. Kundell, J. Meyer, R. Jackson, E. Kramer. \$300,000 Georgia Department of Natural Resources (2001-2004)
- NSF National Center for Ecological Analysis and Synthesis. National River Restoration Science Synthesis. Member of group with funding to Margaret Palmer (U. Maryland).

- C.S. Mott Foundation (through University of Maryland) Assessing the effectiveness of stream restoration projects in the Southeast. \$55,000 (2002-2004)
- The Nature Conservancy. Developing ecosystem flow recommendations for the Savannah River below Thurmond Dam. \$55,000 (2002-2003)
- NSF Frontiers in Integrative Biological Research. Microbiological networks: integrating hydrology, biogeochemistry and microbiology within linked terrestrial/aquatic biological systems. \$50,000 (2004-2005)
- NSF Ecosystem Studies Program. Reassembling a detritus-based ecosystem: consequences of detrital complexity for ecosystem function. J.B. Wallace, J.L. Meyer, J.R. Webster, K. Suberkropp. \$1,007,000 (2002 - 2006)

TEACHING ACTIVITIES AT UNIVERSITY OF GEORGIA

Courses Taught

Ecology (BIO 350), Freshwater Biology (ZOO 812, 812L), Freshwater Ecology (ZOO 815, 815L), Limnology and Oceanography (ZOO 810, 810L), Limnology (ECOL/FORS 4310/6310 and lab), Ecology Seminar (ZOO 856), Senior Seminar (ZOO 499), Stream Ecology Seminar (ENTO/ECOL 8220), Directed Undergraduate Research (ZOO 498, BIO 498H, ECOL 3900, 4940, 4960), Ecological Basis of Environmental Issues (ECOL 1000), Directed Readings-Projects (BIO497H, Freshman Seminar (HON 199), Sustainable Metropolitan Ecosystems (ECL900)

Graduate Students

Theses and dissertations under my direction:

- Debby Potter, M.S. Zoology 1981. Limnological analysis of a pumped storage reservoir during its first two years of development.
- Mike Stevens, M.S. Zoology 1981. Benthic ecology and chemical limnology of Lake Oconee during its first year.
- Erin O'Doherty, M.S. Zoology 1982. The life history of a stream-dwelling harpacticoid copepod.
- Rick Edwards, Ph.D. Ecology 1985. The role of seston bacteria in the metabolism and secondary production dynamics of southeastern blackwater rivers.
- M. Tad Crocker, M.S. Zoology 1986. Interstitial dissolved organic carbon at a spring seep.
- Gail Cowie, M.S. Zoology 1987. Benthic macroinvertebrates in a river with modified flow.
- Les Carlough, M.S. Zoology 1987. Protozoa in two southeastern blackwater rivers and their importance to trophic transfer.
- Erin O'Doherty, Ph.D. Ecology 1988. The ecology of meiofauna in an Appalachian headwater stream.
- Dan Perlmuter, Ph. D. Ecology 1988. Meiofauna in stream leaf litter: Patterns of occurrence and ecological significance
- Nancy Munn, Ph.D. Ecology 1989. The role of stream substrate and local geomorphology in the retention of nutrients in headwater streams.
- Solon Smith, M.S. Zoology 1989. The effects of nutrient enrichment on fungal biomass and leaf litter decomposition in a headwater stream.
- Les Carlough, Ph.D. Ecology 1989. Sestonic protists in the foodweb of a southeastern blackwater river

- William Pulliam, Ph.D. Ecology 1991. Carbon dioxide and methane exports from a southeastern floodplain swamp: patterns, pathways and sensitivity to climate.
- Laura Leff, Ph.D. Ecology 1992. The bacterial assemblage of a Coastal Plain stream: Composition, sources and transport.
- Michael Paul, M.S. Zoology 1994. Fungal biomass associated with decomposing leaves in a Southern Appalachian stream.
- Carol Couch, Ph.D. Ecology 1994. Trophic significance of bacterial extracellular polysaccharide and dissolved organic matter in a blackwater river.
- Peter Vila, Ph.D. Ecology 1996. Size structure of the zoobenthos in headwater streams: meiofaunal-macroinvertebrate interactions.
- Robert Hall, Jr. Ph.D. Ecology. 1996. Bacterivory and carbon flow in stream food webs.
- Kevin Barnes, M.S. Conservation Biology and Sustainable Development. 1998. The effects of sedimentation on Georgia's fish assemblages with emphasis on the Upper Etowah River system.
- Andrew Sutherland, M.S. Conservation Biology and Sustainable Development. 1998. Effects of land-use change on sediment regime and fish assemblages in the Upper Little Tennessee River.
- Michael Paul, Ph.D. Ecology. 1999. Stream ecosystem function along a land-use gradient.
- Diane Sanzone, Ph.D. Ecology. 2001. Linking communities across ecosystem boundaries: The influence of aquatic subsidies on terrestrial predators.
- Emma Rosi-Marshall, Ph.D. Ecology. 2002. Metal contamination in food webs of the Chattahoochee River.
- Edward P. Gardiner, Ph.D. Ecology. 2002. Geospatial techniques for stream research in the southern Blue Ridge mountains.
- Susan Herbert, M.S. Ecology. 2003. The impact of lawn care practices on suburban streams in metropolitan Atlanta GA
- Krista Jones, M.S. Ecology. 2004. (co-advise with Geoffrey Poole) Predicting trout population and fish assemblage responses to reduced riparian buffer widths in northern Georgia, USA.
- Elizabeth Sudduth, M.S. Ecology. 2004. Effects of bioengineered bank stabilization on urban streams.
- Allison Roy, Ph.D. Ecology. 2004 (co-advise with Mary Freeman) Biological responses to riparian deforestation in urbanizing catchments.
- Cathy Gibson, Ph.D. Ecology. 2004. Alterations in ecosystem processes as a result of anthropogenic modifications to streams and their catchments.
- Andrew Sutherland, Ph.D. Ecology. 2005. Effects of excessive sedimentation on the stress, growth and reproduction of two southern Appalachian minnows, *Erimonax monachus* and *Cyprinella galactura*.
- Monica Palta, M.S. Ecology. 2005. Changes in diameter growth of *Taxodium distichum* (L.) Rich in response to flow alterations of the Savannah River.
- Gretchen Peltier, Ph.D. Ecology. 2006. Trace element accumulation in lotic systems: implications for aquatic organisms and human health.

William Duncan, Ph.D. Ecology. 2008. Geomorphic and hydrologic factors influencing the distribution of river shoals and associated biota.

Post-doctoral associates in my laboratory

S.G. Findlay (1981-1985)
 R.T. Edwards (1985-1987)
 S. Wainright (1988)
 F. Sabater (1988-1989)
 M. Beare (1990-93)
 D. D'Angelo (1992-1994)
 W. Cheng (1993-94)
 J.A. Yeakley (1992-1995)
 B. Potter (1994-1997)
 A. Rosemond (1995-1997)
 E. Kramer (1996-1997)

Member of Graduate Faculty (1979-2009) during which time I served on 40 advisory committees for M.S. Students and 78 advisory committees for Ph.D. students in addition to the 33 students for whom I was major advisor

SERVICE

Provide comments from over 30 scientists on guidelines for stream mitigation proposed by EPA and Army Corps. (2006)
 Testify as expert witness (pro bono) for Sierra Club and St. John's Riverkeeper on importance of detrital exports for river foodwebs in court case in Jacksonville FL. (2005)
 Primary author of Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands, published by American Rivers and Sierra Club (2003)
 Presentation to U.S. House and Senate staff on value of headwater streams and threats to them from proposed changes in the Clean Water Act (2003)
 Compile scientific comments from over 50 stream ecologists on Advanced Notice of Proposed Rulemaking regarding changes in Clean Water Act (2003)
 Assist Hydropower Reform Coalition with their appeal of the FERC relicensing of Middle Chattahoochee project (2002)
 Technical Advisory Group for TMDLs, Georgia Conservancy (2000 - 2003)
 Prepare affidavit and testify for Upper Chattahoochee Riverkeeper regarding an appeal of a water withdrawal permit (2001)
 Georgia Board of Regents Scientific Panel on Evaluating the Erosion Measurement Standard Defined by the Georgia Erosion and Sedimentation Act. The report produced by the committee received an Honorable Mention from the Universities Council on Water Resources
 Faculty Advisor Students for Environmental Awareness (1992-1995)
 Georgia Wetlands Trust Fund Selection Committee (1998-2004)
 Prepare affidavit and testify (pro bono) for Southern Environmental Law Center lawsuit on turbidity in Georgia Rivers (1998)
 Participate in discussions with AWARE team working on legislative advice for swine production in Georgia, advising them on phosphorus limitation in Georgia's freshwaters

Presentation to Special Committee of the Georgia Legislature
considering riparian buffer zones for trout streams (1998)

Departmental committees

Search Committee, Director for Institute of Ecology (2002)
Institute of Ecology Executive Committee (1982-96, 2002-2005)
SEEDS (Students and Educators for Environmental Design and
Sustainability) Faculty participant and advisor (2000 -
2003)
Ecology Admissions Committee (1979-1984; 2000-2003)
Institute of Ecology Faculty Awards Committee (1997-present)
Ad Hoc Committee on developing dispute resolution procedures
(1995-1997)
Search committee, Entomology Dept. (1994)
Institute of Ecology Space Committee (1994-2000, chair 1997-
2000)
Zoology Curriculum Committee (1980-92, chairman 1981-83, 91-92)
Search Committee, Hydrologist, Forest Resources (1991)
Biological Sciences Curriculum Committee (1988-1993)
Search Committee, Assoc. Director, Institute of Ecology (1987)
Ecology Degree Program Steering Committee (1982-85, 1987-92)
Search Committee, Physiological Ecologist, Botany Dept. (1986)
Institute of Ecology, Analytical Laboratory Oversight
Committee (1986-1988)
Ad Hoc Committee for bylaws for Ecology Degree Program (1986)
Search Committee, Invertebrate Ecologist (1985-1986)
Search Committee, Entomology Dept. (1983)
Ecology Curriculum Committee (1979, 1983)
Institute of Ecology Planning Committee (1982-1984)
Zoology Headship Search Committee (1981)
Zoology Department Committee on Developing Criteria for Faculty
Evaluation (1981-1982)
Zoology Department Executive Committee (Alternate, 1980-1983)
Zoology Graduate Student Performance Committee (1979-1983)
Zoology Department Self-Study Committee (1979)
Marine Sciences Seminar Committee (1979-80)

University-wide committees

Graduate School Ad Hoc Committee of Graduate Faculty on General
Education/Student Learning (2005)
Office of Research Services Faculty Advisory Board (2003)
UGA Conflict of Interest Committee (2003)
University Faculty Awards Review Committee (2002)
Graduate School Review Committee for Graduate Faculty
Appointments (2002)
Meigs Professor Selection Committee (2001-2002)
Life Sciences Promotion/Tenure Review (2001-2003, 2005)
Nutrient Management Plan Task Force, College of Agriculture
(1999-2001)
Research/Regents Professor Selection Committee, Franklin
College (1996-1999)
College of Agriculture Strategic Planning Committee (1996)
Tenure / Promotion Review Committee, Life Sciences (1993)
Search Committee, Endowed Chair in Water Quality, UGA (1992)
Search Committee, Dean of College of Arts and Sciences (92-93)
Environmental Literacy Board (1992-1995)
University-wide Instructional Advisory Committee (1990-1993)

Ad hoc Committee on Recruitment and Retention of Minorities,
Franklin College (1990)
Awards Committee, Franklin College (1989-1990)
Evaluation of graduate program in College of Pharmacy (1987-
1988)
Task force to revise University Statutes for Franklin College
Reform Committee (1986)
Ad Hoc Committee on Campus Daycare (1986-1987)
Faculty Affairs Committee, University Council (1985-1986)
Executive Committee, Faculty Senate (1985-1986)
Search Committee, Physics Department Head (1984-1985)
University Council (1983-1986)
Library and Instructional Aids Committee (83-86; chair 84-86)
Honors Council (1983-1985)
Faculty Senate Steering Committee (1983-1985; chair 1984-85)
Faculty Senate (1983-1986)